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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,076	02/08/2002	B. Raghava Reddy	HES 2000-IP-001952U1	3375

28857 7590 01/30/2004  
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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/071,076

Applicant(s)

REDDY ET AL.

Examiner

Philip C Tucker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 1-36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54-59 is/are allowed.
- 6) ☒ Claim(s) 37-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Claims 1-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected composition, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 37-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 42 and 43, 2-acrylamido-2-methylpropane sulfonic acid (AMPS) and its salts satisfy the requirements for the first calcium tolerant monomer, and the monomer which generates anionic carboxylate groups. It is thus not clear if a polymer comprising AMPS and the pendant group monomer only satisfies the requirement of the copolymer.

In claim 44, it is not clear if the monomer referred to is in the copolymer or the homopolymer, or both.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 37-44 and 47-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brothers (4806164).

Brothers teaches a cement composition used in wells, which comprises a copolymer of AMPS and styrene (see claims and abstract). According to applicants claims 42 and 43, AMPS satisfies the requirement for both the calcium tolerant monomer and the carboxylate generating monomer, and styrene would satisfy the requirement for the non-ionic pendant monomer. Brothers teaches that other fluid loss additives, such as acrylamide, may be added to the cement composition (see column 5, lines 3-9). Brothers differs from the present invention in that a the use of a second fluid loss homopolymer is not exemplified, and the molecular weight thereof is not disclosed. It would however be obvious to one of ordinary skill in the art to make compositions comprising a a second fluid loss homopolymer, such as polyacrylamide, given the teaching of Brothers that such is useful in the cement composition. The variation of the molecular weight of the polyacrylamide in order to optimize fluid loss in the cement composition would be an obvious variation to one of ordinary skill in the art.

6. Claims 37-44 and 47-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brothers (4700780).

Brothers teaches a cement composition used in wells, which comprises a copolymer of AMPS, acrylic acid and styrene (see claims and abstract). According to applicants claims 42 and 43, AMPS satisfies the requirement for both the calcium

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tolerant monomer and the carboxylate generating monomer, and styrene would satisfy the requirement for the non-ionic pendant monomer. Acrylic acid would also satisfy a monomer which generates carboxylic groups. Brothers teaches that other fluid loss additives, such as acrylamide, may be added to the cement composition (see column 5, lines 31-37). Brothers differs from the present invention in that a the use of a second fluid loss homopolymer is not exemplified, and the molecular weight thereof is not disclosed. It would however be obvious to one of ordinary skill in the art to make cement compositions comprising a a second fluid loss homopolymer, such as polyacrylamide, given the teaching of Brothers that such is useful in the cement composition. The variation of the molecular weight of the polyacrylamide in order to optimize fluid loss in the cement composition would be an obvious variation to one of ordinary skill in the art.

7. Claims 54-59 are allowable over the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

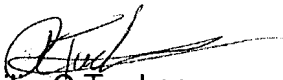
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Philip C Tucker  
Primary Examiner  
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PCT-2943